

Inhospital CRF

Emergency department

- 1) Hospital
 Södersjukhuset Karolinska Solna Other
-
- 2) Time of hospital arrival

-
- 3) Sustained ROSC (>20 minutes without CPR) at hospital arrival?
 Yes No
-
- 4) Admitted alive?
 Yes No
-
- 5) Patient declared dead at emergency department
 Yes No
-
- 6) Time of ROSC (only if ROSC after hospital arrival)

First registered vital functions upon arrival to hospital (in ER, ICU or other location)

- 7) Systolic blood pressure (mmHg)

-
- 8) Diastolic blood pressure (mmHg)

-
- 9) Mean arterial pressure (MAP) (mmHg)

-
- 10) Spontaneous breathing
 Yes No

11) Glasgow Coma Scale (GCS)

- 3 4 5 6 7 8 9 10 11 12 13 14 15
-

12) Pupillary response

- Present bilaterally
 Absent bilaterally
 Absent unilaterally
 Not assessed
-

13) Tympanic temperature (°C)

14) Core temperature (°C)

15) Core temperature location

- Rectal
 Bladder
 Esophageal
 Blood
-

16) ECG findings (post-ROSC)

- STEMI (>1mm ST elevation in ≥ 2 leads)
 New LBBB
 ST-segment depression (>1 mm in ≥ 2 leads)
 None of the above
 Other
-

First arterial blood gas available after ROSC

17) pH

Conversion of mmHg to kPa
mmHg value * 0.133322

18) pO₂ (kPa)

19) pCO₂ (kPa)

20) Base excess (mmol/L)

21) Lactate (mg/dl)

22) O2-saturation (%)

23) Hb (g/dl)

24) B-glucose (mmol/L)

SOFA Score

Conversion of mmHg to kPa
mmHg value * 0.133322










Admission Day 1 Day 2 Day 3
PaO2 _____
Fraction Inspired Oxygen (%) _____
Creatinine _____
Glasgow Coma Scale _____
Bilirubin (mg/dL) _____
Platelet count ($\times 10^9/L$) _____
Cardiovascular function (check one) _____

Patients status prior to cardiac arrest (e.g. prior to randomization)

25) Previous (before cardiac arrest) know co-morbidity
(Check all that apply)

- Ischeamic heart disease
- Previous myocardial infarction
- Heart failure
- Atrial fibrillation/flutter
- Hypertension
- Diabetes type 1
- Diabetes type 2
- Chronic kidney disease
- Chronic liver disease
- Cancer
- Stroke/TIA
- Chronic obstructive pulmonary disease
- HIV
- None of the above

frailty

<p>1 Very Fit – People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.</p>	
<p>2 Well – People who have no active disease symptoms but are less fit than category 1. Often, they exercise or are very active occasionally, e.g. seasonally.</p>	
<p>3 Managing Well – People whose medical problems are well controlled, but are not regularly active beyond routine walking.</p>	
<p>4 Vulnerable – While not dependent on others for daily help, often symptoms limit activities. A common complaint is being "slowed up" and/or being tired during the day.</p>	
<p>5 Mildly Frail – These people often have more evident slowing, and need help in high order IADLs (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.</p>	
<p>6 Moderately Frail – People need help with all outside activities and with keeping house. Inside, they often have problems with stairs and need help with bathing and might need minimal assistance (cuing, standby) with dressing.</p>	
<p>7 Severely Frail – Completely dependent for personal care, from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~ 6 months).</p>	
<p>8 Very Severely Frail – Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.</p>	
<p>9 Terminally Ill – Approaching the end of life. This category applies to people with a life expectancy <6 months, who are not otherwise evidently frail.</p>	

26) Fitness/frailty before OHCA

- 1 Very Fit - People who are robust, active, energetic and motivated
 2 Well - People who have no active disease symptoms but are less fit than category 1
 3 Managing Well - People whose medical problems are well controlled, but are not regularly active beyond routine walking.
 4 Vulnerable - While not dependent on others for daily help, often symptoms limit activities.
 5 Mildly Frail - These people often have more evident slowing, and need help in high order IADLs
 6 Moderately Frail - People need help with all outside activities and with keeping house.
 7 Severely Frail - Completely dependent for personal care, from whatever cause (physical or cognitive)
 8 Very Severely Frail - Completely dependent, approaching the end of life. T
 9 Terminally Ill - Approaching the end of life.

27) Estimated pre-arrest mRS

- 0 - No neurological symptoms
 1 - No significant neurological symptoms. Able to carry out usual activities, despite some symptoms
 2 - Slight disability. Able to look after own affairs without assistance, but unable to carry out all previous activities
 3 - Moderate disability. Requires some help, but able to walk unassisted
 4 - Moderate severe disability. Unable to attend to own bodily needs without assistance or unable to walk unassisted
 5 - Severe disability. Requires constant nursing care and attention, bedridden, incontinent

Core variables for systemic hypothermia in the intervention group

28) Cooling method

- Intravenous system
 Surface system

29) Time of initiation of systemic cooling

30) Was trans-nasal cooling interrupted prior to systemic cooling?

- Yes
 No

31) If trans-nasal cooling was interrupted, please specify reason

32) Time of termination of cooling with RhinoChill

Register core temperature and tympanic temperature every 20 minutes from start of systemic cooling until target temperature is reached

Minutes from start of systemic cooling Core temperature

Start _____
 20 _____
 40 _____
 60 _____
 80 (1 h, 20 min) _____
 100 (1 h, 40 min) _____
 120 (2 h) _____
 140 (2 h, 20 min) _____
 160 (2 h, 40 min) _____
 180 (3 h) _____

- 180 (3 h) _____
- 200 (3 h, 20 min) _____
- 220 (3 h, 40 min) _____
- 240 (4 h) _____
- 260 (4 h, 20 min) _____
- 280 (4 h, 40 min) _____

33) Time of core temperature ≤ 34 °C

34) Time of Core temperature ≤ 33 °C

Register core temperature every hour during maintenance phase (start registration 1 hour after target temperature is reached)

Core temperature

- Hour 1 _____
- Hour 2 _____
- Hour 3 _____
- Hour 4 _____
- Hour 5 _____
- Hour 6 _____
- Hour 7 _____
- Hour 8 _____
- Hour 9 _____
- Hour 10 _____
- Hour 11 _____
- Hour 12 _____
- Hour 13 _____
- Hour 14 _____
- Hour 15 _____
- Hour 16 _____
- Hour 17 _____
- Hour 18 _____
- Hour 19 _____
- Hour 20 _____
- Hour 21 _____
- Hour 22 _____
- Hour 23 _____
- Hour 24 _____

35) Time of termination of systemic cooling (start of rewarming)

36) Time of core temperature ≥ 36.5 °C

37) Did the patient have fever > 37.7 °C during the first 72 hours

- Yes No

Echocardiography findings

38) LVEF (%) at 24 hours

- Normal (> 55%)
- Mildly reduced (45-54%)
- Moderately reduced (30-44%)
- Severely reduced (< 30%)
- Not performed

39) LVEF (%) at 72 hours

- Normal (> 55%)
- Mildly reduced (45-54%)
- Moderately reduced (30-44%)
- Severely reduced (< 30%)
- Not performed

Serious adverse events within 7 days

40) Moderate bleeding, according to the GUSTO criteria (bleeding requiring transfusion, but not resulting in haemodynamic compromise)

- Yes No

41) Severe bleeding according to Gusto criteria (intracranial hemorrhage or bleeding resulting in haemodynamic compromise necessitating intervention)

- Yes
 No

42) Sepsis and septic shock, according to the 3rd international consensus definitions for sepsis and septic shock?

- Yes No

43) Arrhythmia resulting in hemodynamic compromise?

- No
- Bradycardia with need for pacing
- Ventricular tachycardia
- Ventricular fibrillation

44) Cerebrovascular lesion during ICU stay

- Yes No

45) New cardiac arrest after enrollment

- Yes
 No

46) Circulatory complications?

- No
- Cardiogenic shock requiring inotropes
- Cardiogenic shock requiring mechanical support

47) Device related adverse events

- Yes
 No
 Uncertain (needs adjudication)
-

48) If device related adverse events = Yes, Specify

49) Did device related or other unexpected serious adverse event occur?

- Yes (fill in safety CRF) No
-

Sedation

50) Was the patient sedated 40 h according to protocol?

- Yes No
-

51) If sedation was terminated before 40 h from cardiac arrest, describe why

Lab tests (During ICU stay)

52) NSE at 24 hours (if applicable)

53) NSE at 48 hours (if applicable)

54) NSE at 72 hours (if applicable)

55) Maximum level of Troponin T within 24 hours (if used by center)

56) Maximum level of Troponin I within 24 hours (if used by center)

Angiography/Revascularization

57) Angiography performed

- Not performed
 Acute within 24h after admission
 During ICU/hospital stay

58) PCI_performed

- Yes No

Delirium

59) Symptoms of delirium at the time of ICU discharge?

Identified by: ICD-code for delirium, or positive delirium screening with the delirium assessment instrument used at the site (E.g. the CAM-ICU, the Nu-DESC etc.), or delirium described by text in the medical journals (according to the DSM-5 criteria for delirium).

- Yes
 No
 Missing
 Not applicable

60) Symptoms of delirium at seven days or later after OHCA?

Identified by: ICD-code for delirium, or positive delirium screening with the delirium assessment instrument used at the site (E.g. the CAM-ICU, the Nu-DESC etc.), or delirium described by text in the medical journals (according to the DSM-5 criteria).

- Yes
 No
 Missing
 Not applicable

Organ support during ICU stay

61) Was the patient supported by an intra-aortic ballon pump (IABP)

- Yes No

62) Was the patient supported by ECMO?

- Yes No

63) If yes, was the patient put on ECMO during CPR (ECPR)?

- Yes No

64) If supported with ECPR, when was ECMO started?

65) Was the patient supported by an Impella?

- Yes No

66) Was the patient treated with continuous renal replacement therapy?

- Yes No

67) Deviation from protocol

- Yes No

68) If protocol deviation = Yes, describe

Prognostication at 72 hours

69) Time for prognostication

70) Does the patient fulfill the study criteria for a likely poor neurological outcome?

- Yes
 No

71) What prognostic methods beyond clinical neurological assessment were used for prognostication?
(tick all that apply)

- NSE
 SSEP
 EEG
 MR/CT brain scan

Withdrawal of life sustaining therapies / ICU care discontinued

72) What prognostic methods beyond clinical neurological assessment were used in the event that a decision was made to discontinue intensive care?
(tick all that apply)

- NSE
 SSEP
 EEG
 MR/CT brain scan

73) When was intensive care terminated?

74) If treatment terminated before 72 hours from randomization. Describe why?

75) Did patient die during hospital stay?

- Yes (fill in below)
- No

76) If yes, where did the patient die

- ICU
- Hospital ward

77) Cause of death

- Cerebral
- Cardiac
- Infection
- Multi-organ failure
- Other

78) No. of days in hospital

79) mRS at hospital discharge

- 0 - No neurological symptoms.
- 1 - No significant neurological symptoms.
- 2 - Slight disability.
- 3 - Moderate disability.
- 4 - Moderate severe disability.
- 5 - Severe disability.

80) Patient discharged to

- Home
- Rehabilitation
- Other